

$$(x + y)^n = \sum_{k=1}^n \binom{n}{k} x^k y^{n-k}$$

$$\limsup A_n = \bigcap_{n=1}^{\infty} \bigcup_{k \geq n} A_k$$

$\mathbb{Z}, \mathbb{Q}, \mathbb{R}, \mathbb{C}$